

REMARKS

INTRODUCTION

In accordance with the following, reconsideration of the allowability of the claims is respectfully requested.

Claims 1-11 are pending and under consideration.

REQUEST FOR NEW NON-FINAL OFFICE ACTION

As noted in at least MPEP 707.07(f), the Examiner is required to answer and address all traversals. This requirement is in addition to any repetition of a previously held position and is required to allow the applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal.

Additionally and as further noted in MPEP 707.07(f), a failure of the Examiner to address the applicant's traversals can be deemed a failure to rebut these arguments so as to admit that the arguments have overcome the rejection. At the very least, the failure to address the applicant's traversals would render the Examiner's decision to again reject the claims arbitrary and capricious and invalid under the Administrative Procedures Act, 5 U.S.C. § 706, the standard under which such rejections are reviewed in view of Dickinson v. Zurko, 527 U.S. 150, 50 USPQ2d 1930 (1999).

The previous response presented a number of different reasons why Saylor, U.S. Patent No. 6,084,372, would not disclose the presently claimed invention, even if modified as proffered, and why the modification would not have been obvious.

In particular, applicants first noted that the then obviousness rejection appeared to rely on an Official Notice stance, and that the same was improper. The outstanding Office Action now sets forth an obviousness rejection without the original Official Notice language. Thus, it would appear that the Office Action has responded to this applicant comment.

However, applicants also presented at least three additional comments pointing out why the underlying obviousness argument was improper, i.e., the lack of evidenced motivation and the apparent obvious to try or design choice rejection rationales, and why Saylor failed to disclose all the features proffered in the Office Action and why it would not have been obvious to modify Saylor to disclose the same. Though the outstanding rejections are now based on a combination of Saylor and Kono et al., U.S. Patent No. 5,267,142, the underlying rationales are the same.

These comments by the applicants have not been commented on. The outstanding rejections would appear to merely again present the same rejections, now using Kono et al. in place of the previously argued well-known feature.

As such, since the Examiner has not addressed the applicant's traversals presented in the Amendment of March 2, 2004, it is respectfully submitted that the outstanding Office Action is improper. Applicant further requests that any new Office Action, in response to the outstanding response, be a new non-final Office Action addressing the arguments presented in the present response and that of March 2, 2004.

REJECTION UNDER 35 USC 103

Claims 1, 5, 6 and 10-11 stand rejected under 35 USC § 103 as being obvious over Saylor, U.S. Patent No. 6,084,372, in view of Kono et al., U.S. Patent No. 5,267,142. This rejection is respectfully traversed.

First, it is noted that the Office Action has set forth a new obviousness rejection based on a combination of Saylor and Kono et al., inherently withdrawing the previously set forth Official Notice rejection rationale. The Office Action indicates that Kono et al. is being provided as evidential support for the previous Official Notice, but the rejection is a new ground of rejection based on an obviousness combination of Saylor and Kono et al.. It is respectfully submitted that the notoriousness of the previously indicated well known feature has not been supported and the previous taking of Official Notice was not proper.

Secondly, it is noted that the Office Action rejects claim 11 based solely on the arguments presented against independent claim 6, "since claim 11 is a method analogous to the apparatus of claim 6."

However, it is respectfully noted that independent claim 11 includes the following feature: "such that a velocity of the follower element varies linearly from a velocity at the follower motion start position and a velocity at the start position for starting the synchronization," which is not included in independent claim 6 and is not disclosed by Saylor or a combination of Saylor and Kono.

Therefore, the rejection of independent claim 11 fails to meet a prima facie obviousness standard. If the underlying rejection of the remaining claims is maintained, then a new non-final Office Action will be necessary with a new rejection to independent claim 11.

As noted above, the outstanding rejection of claims 1, 5, 6 and 10-11 is substantially identical to the previous rejection of claims 1, 5, 6 and 10 based solely on a modification of Saylor to incorporate a storing mechanism with the controller of Saylor because it would provide "for future utilization," with the outstanding Office Action adding the motivational statement of providing for "future utilization when the absolute value of the difference between stored values of the positions becomes equal or less than an allowable value."

Again, however, the Office Action fails to provide evidenced support for the purported motivation of providing for "future utilization when the absolute value of the difference between stored values of the positions becomes equal or less than an allowable value." This motivation would merely appear to be an opinion of the Examiner and not supported by the record.

The mere fact, however, that the prior art may be modified in the manner suggested in the Office Action does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F. 2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Further, it is well settled that "the Board [and Examiner] cannot simply reach conclusions based on [their] own understanding of experience - or on [their] assessment of what would be basic knowledge or common sense. Rather the Board must point to some concrete evidence in the record in support of these findings." In re Zurko, 258 F. 3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). See also In re Lee, 277 F. 3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002), in which the court required evidence for the determination of unpatentability by clarifying that the principles of "*common knowledge*" and "*common sense*" may only be applied to the analysis of evidence, rather than be a substitute for evidence. The court has also recently expanded their reasoning on this topic in In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002).

Thus, accordingly, a prima facie obviousness rejection requires concrete evidenced motivation from something in the record that would lead one skilled in the art to combine the relevant teachings, again noting that the mere fact that the prior art may be modified in a particular manner does not make the modification obvious unless the prior art suggested the desirability of that modification.

The Office Action must provide support, in the record, for the purported motivation for modifying Saylor. It would appear that the underlying motivation has been derived by the Examiner and not specifically supported by the record.

In addition, as previously noted, it is respectfully submitted that the underlying understanding of the disclosure of Saylor may be mistaken.

The independent claims set forth a positional relationship between the leading element and the follower element in synchronism, and a start position for starting the synchronism of the follower element and the leading element are set or stored in advance.

A simple proportional relation (electric gearing), or a simple cam profile relation between the leading element and the follower element, can be represented by a simple mathematical equation. Then trigger point (for point lock) at which the two elements are brought into synchronism can be calculated.

However, regarding a cam profile defined by a free curve, which can be hardly represented by a mathematical equation, it is impossible to obtain the point lock by the calculation according to a mathematical equation. **Since Saylor requires the use of a calculation to determine the trigger point, Saylor would not need the aforementioned features, i.e., Saylor is not directed to a free curve and thus would not need the aforementioned features.**

Thus, it is respectfully submitted that the aforementioned setting or storing of a start position for starting the synchronism of the leading element and the follower element in advance, for accelerating the follower element from the motion start position to the start position of the synchronism, is patentably distinct from the disclosure of Saylor (or obvious modification of the same). **For example, the fact that the system of Saylor can not handle the case when the start position of the synchronism is not obtained by the necessary calculation is further evidence that Saylor fails to disclose or suggest at least these aforementioned features.**

Thus, it is respectfully submitted that that the outstanding rejections of the independent claims fail to meet a prima facie obviousness case and that the underlying presumptions, and proffered modifications, of Saylor are unsupported by the disclosure of Saylor, as explained above. Further, as noted above, it is respectfully submitted that sufficient concrete evidence of motivation has not been presented in the record to support a prima facie obviousness case for the combination of Saylor and Kone et al.

In addition, regarding the Office Action's contention that the presently claimed invention would be disclosed by the addition of Kono et al. to Saylor, this contention is respectfully traversed.

Kono et al., in col. 6, lines 28-36, details that when it is determined in the referenced step S1, in the next itp period, that the value of the second flag F2 is "1", the first processor enters the step S9 to cause a built-in third and fourth registers to store the current value of the position counter 112, representing the rotational position of the first spindle 10, and the value of the latch circuit 113, representing the first-spindle rotational position at an instant at which the one-revolution signal is generated, respectively.

Kono et al. relates to a spindle rotation control method for driving the first and second spindles at the same rotational speed and at the same rotational phase, and the above referenced portion of Kono et al. merely refers to storing of a rotational position of the first spindle at which a one-revolution signal is generated in order to adjust the rotational phase in the state of the first and second spindles rotating at the same rotational speed.

Thus, Kono et al. would not teach nor suggest to one skilled in the art to store a start position for storing the synchronism of the follower element and the leading element in order to accelerate the follower element from the motion start position preceding the start position of the synchronism, as recited in claims 1 and 6.

Further, based on the above, even if the disclosure of Kono et al. were combined with the disclosure of Saylor, the resultant arrangement of that combination still would not disclose the presently claimed invention.

Therefore, for at least all the above, it is respectfully requested that this rejection of claims 1, 6, and 11 be withdrawn and claims 1, 6, and 11 be allowed. In addition, for at least similar rationale, it is respectfully submitted that claims depending from claims 1 and 6 are in proper condition for allowance. Lastly, it is respectfully submitted that the remaining cited references similarly fail to make up for the deficiencies of Saylor and Kono et al., and similarly fail to provide support or suggestions for the modifications of the same to disclose the presently claimed invention.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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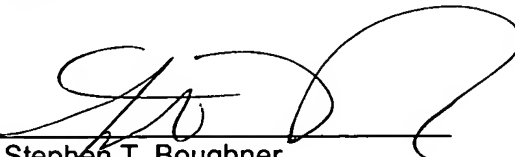
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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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